

ICF International / Laboratory Data Consultants

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MEMORANDUM

TO:

Chris Lichens, Remedial Project Manager

Site Cleanup Section 4, SFD-7-4

THROUGH:

Rose Fong, ESAT Task Order Manager (TOM)

Quality Assurance (QA) Program, MTS-3

FROM:

Doug Lindelof, Data Review Task Manager

Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041

Technical Direction Form No.: 00105074 Amendment 3

DATE:

August 16, 2007

SUBJECT:

Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:

Omega Chem OU2

Site Account No.:

09 BC LA02

CERCLIS ID No.:

CAD042245001

Case No.:

None Provided

SDG No.:

IQC0291

Laboratory:

TestAmerica Analytical Testing Corp.

Analysis:

Hexavalent Chromium

Samples:

5 Groundwater Samples (see Case Summary)

PF

Collection Dates:

March 2, 2007

Reviewer:

Stan Kott, ESAT/Laboratory Data Consultants

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

SAMPLING ISSUES: [X] Yes [] No

Data Validation Report

Case No.: None Provided

SDG No.: IQC0291

Site: Omega Chem OU2

Laboratory: TestAmerica Analytical Testing Corp.

Reviewer: Stan Kott, ESAT/LDC Date: August 16, 2007

I. CASE SUMMARY

Sample Information

Samples: OC2-MW20C-W-0-481, OC2-MW20B-W-0-482,

OC2-MW20A-W-0-483, OC2-MW9B-W-0-485, and

OC2-MW9A-W-0-486

Concentration and Matrix: Low Concentration Water

Analysis: Hexavalent Chromium SOW: EPA Method 218.6

Collection Date: March 2, 2007

Sample Receipt Date: March 2, 2007 Preparation Date: March 2, 2007 Analysis Date: March 2, 2007

Field QC

Field Blanks (FB): Not Provided Equipment Blanks (EB): Not Provided Background Samples (BG): Not Provided

Field Duplicates (D1): Not Provided

Laboratory QC

Method Blanks: 7C02041-BLK1 Associated Samples: Samples listed above

Matrix Spikes: OC2-MW20C-W-0-481MS1 Matrix Spike Duplicates: OC2-MW20C-W-0-481MSD1

Analysis: Hexavalent Chromium

Analyte Hexavalent Chromium Sample Preparation Date March 2, 2007

Analysis Date March 2, 2007

Sampling Issues

The Chain of Custody (COC) record form did not specify a sample to be used for laboratory quality control (QC). As a result, the laboratory selected sample OC2-MW20C-W-O-481. The effect on data quality is not known.

Additional Comments

As directed by the EPA TOM, a Tier 3 data review was performed. A Table 1A is not requested.

The method specifies the sample pH be adjusted to 9.0 to 9.5 prior to analysis; however, there is no method specific requirement to document the sample pH. The pH of the samples prior to analysis could not be evaluated. The effect on data quality is not known.

Definitions of data qualifiers are listed in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages;
- Methods For The Determination Of Metals In Environmental Samples, EPA-600/4-91-010, June 1991; and
- USEPA Method 218.6, Determination of Dissolved Hexavalent Chromium in Drinking Water, Groundwater, and Industrial Wastewater Effluents by Ion Chromatography, Revision 3.3, May 1994.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

| | <u>Parameter</u> | <u>Acceptable</u> | Comment |
|-----|----------------------------------------------------|-------------------|---------|
| 1. | Data Completeness | Yes | |
| 2. | Sample Preservation and Holding Times | Yes | |
| 3. | Calibration | Yes | |
| | a. Initial | | |
| | b. Initial and Continuing Calibration Verification | tion | |
| 4. | Blanks | Yes | |
| 5. | Laboratory Control Sample (LCS) | Yes | |
| 6. | Duplicate Sample Analysis | Yes | |
| 7. | Matrix Spike Sample Analysis | Yes | |
| 8. | Field Duplicate Sample Analysis | N/A | |
| 9. | Sample Quantitation | Yes | |
| 10. | Overall Assessment | Yes | |

N/A = Not Applicable

III. OVERALL ASSESSMENT OF DATA

All of the method requirements specified in the EPA Method 218.6 have been met. Reported results for hexavalent chromium in all of the samples were appropriately and correctly calculated.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA* Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004.

- U The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
- J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The result is an estimated quantity, but the result may be biased high.
- J- The result is an estimated quantity, but the result may be biased low.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
- UJ The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.